

ATTACHMENT A

Claims

1. (currently amended) A process for patinating articles comprising copper or a copper alloy by means of an in particular aqueous patination solution containing copper ions, ~~characterized in that wherein~~ the article is treated with the patination solution, preferably by applying the patination solution to the article, and the article which has been treated in this way is subjected to a maturing process.
2. (currently amended) The process as claimed in claim 1, ~~characterized in that wherein~~ during the maturing process, temperature and atmospheric humidity are selected, preferably controlled in a temperature- and humidity-controlled chamber.
3. (currently amended) The process as claimed in claim 1 ~~or two,~~ ~~characterized in that wherein~~ the maturing process encompasses the following maturing steps:
 - allowing the treated article to rest at a first rest temperature and a first rest atmospheric humidity for a first rest time,
 - irrigating the treated article at least once at an irrigation temperature and an irrigation atmospheric humidity for an irrigation time, and
 - allowing the treated article to rest at a second rest temperature and a second rest atmospheric humidity for a second rest time.
4. (currently amended) The process as claimed in claim 3, ~~characterized in that wherein~~ the rest temperatures are in the range

from 20°C to 70°C, in particular from 25°C to 55°C, and the rest atmospheric humidities are in the range from 30% to 90%, in particular from 40% to 50%.

5. (currently amended) The process as claimed in claim 3 or 4, characterized in that wherein the second rest temperature corresponds essentially to the first rest temperature and the second rest atmospheric humidity corresponds essentially to the first rest atmospheric humidity.
6. (currently amended) The process as claimed in ~~any of claims 3 to 5, characterized in that claim 3, wherein~~ the irrigation temperature is in the range from 20°C to 70°C, in particular from 25°C to 55°C, and the irrigation atmospheric humidity is in the range from 30% to 95%, in particular from 65% to 80%.
7. (currently amended) The process as claimed in ~~any of claims 3 to 6, characterized in that claim 3, wherein~~ the first rest time and the second rest time are each up to one week, preferably from 2 to 3 days.
8. (currently amended) The process as claimed in ~~any of claims 3 to 7, characterized in that claim 3, wherein~~ the irrigation time is up to one day, preferably from 5 to 10 hours.
9. (currently amended) The process as claimed in ~~any of the preceding claims, characterized in that claim 1, wherein~~ the patination solution contains at least one copper salt, preferably copper nitrate, in a proportion of from 1.5% to 20% by weight, in particular in a proportion of from 3% by weight to 5% by weight.

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10. (currently amended) The process as claimed in ~~any of the preceding claims, characterized in that~~ claim 1, wherein the patination solution contains at least one zinc salt, preferably zinc chloride.
11. (currently amended) The process as claimed in claim 10, ~~characterized in that~~ wherein the patination solution contains the zinc salt in a proportion of from 0.1% by weight to 5% by weight, in particular in a proportion of from 0.2% by weight to 1% by weight.
12. (currently amended) The process as claimed in ~~any of the preceding claims, characterized in that~~ claim 1, wherein chloride and carbonate additives, in particular sodium chloride, ammonium chloride, calcium chloride and/or ammonium carbonate, are present in the patination solution.
13. (currently amended) The process as claimed in ~~any of the preceding claims, characterized in that~~ claim 1, wherein at least one surface treatment selected from the group consisting of cleaning and roughening of the surface is carried out prior to the treatment of the article.
14. (currently amended) The process as claimed in claim 13, ~~characterized in that~~ wherein the cleaning procedure is degreasing, in particular chemical degreasing.
15. (currently amended) The process as claimed in claim 13 or 14, ~~characterized in that~~ wherein the roughening procedure is grinding or a blasting treatment, in particular a glass sandblasting.

16. (currently amended) The process as claimed in ~~any of the preceding claims, characterized in that claim 1, wherein~~ the patination solution is applied in finely divided form, in particular is sprayed on.
17. (currently amended) The process as claimed in ~~any of the preceding claims, characterized in that claim 1, wherein~~ a treatment temperature in the range from 30°C to 70°C, in particular in the range from 40°C to 55°C, is selected in the treatment of the article with the patination solution.
18. (currently amended) The process as claimed in ~~any of the preceding claims, characterized in that claim 1, wherein~~ the patination solution is applied in at least two, preferably 4 – 5, treatment steps.
19. (currently amended) The process as claimed in ~~any of the preceding claims, characterized in that claim 1, wherein~~ at least one surface after-treatment selected from the group consisting of sealing, lightening and darkening of the surface is carried out after the maturing process.
20. (currently amended) The process as claimed in ~~any of the preceding claims, characterized in that claim 1, wherein~~ the article to be patinated is selected from the group consisting of plate material, strip material, shaped part and ornament.
21. (currently amended) A patination solution for patinating articles comprising copper or a copper alloy in the form of a preferably

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aqueous copper salt solution, ~~characterized in that~~ wherein the solution contains zinc ions.

22. (currently amended) The patination solution as claimed in claim 21, ~~characterized in that~~ wherein it contains a zinc salt, in particular zinc chloride, preferably in a proportion of from 0.1% by weight to 5% by weight, in particular from 0.2% by weight to 1% by weight.
23. (currently amended) The patination solution as claimed in claim 21 or 22, ~~characterized in that,~~ wherein at least one copper salt, preferably copper nitrate, is present in a proportion of from 1.5% by weight to 20% by weight, in particular from 3% by weight to 5% by weight.
24. (currently amended) The patination solution as claimed in claim 21 to 23, ~~characterized in that,~~ wherein chloride and carbonate additives, in particular sodium chloride, ammonium chloride, calcium chloride and/or ammonium carbonate, are present in the solution.
25. (currently amended) A patinated article comprising copper or a copper alloy, which can be produced by a process as claimed in any of claims 1 to 20 claim 1.
26. (currently amended) A patinated article comprising copper or a copper alloy, which has been produced by a process as claimed in any of claims 1 to 20 claim 1.

27. (currently amended) The patinated article comprising copper or a copper alloy as claimed in claim 25 or 26, ~~characterized in that wherein it has the following structure:~~
 - a base body comprising copper or a copper alloy selected from the group consisting of plate material, strip material, shaped part and ornament and
 - at least one patina layer which is located on the base body and contains copper ions and zinc ions.
28. (currently amended) The patinated article as claimed in ~~any of claims 25 to 27, characterized in that claim 25,~~ wherein the thickness of the patina is from 0.02 to 0.06 mm, in particular from 0.03 to 0.05 mm.
29. (new) The patinated article comprising copper or a copper alloy as claimed in claim 26 wherein it has the following structure:
 - a base body comprising copper or a copper alloy selected from the group consisting of plate material, strip material, shaped part and ornament and
 - at least one patina layer which is located on the base body and contains copper ions and zinc ions.
30. (new) The patinated article as claimed in claim 26, wherein the thickness of the patina is from 0.02 to 0.06 mm, in particular from 0.03 to 0.05 mm.